

swamps at all. So much for my cedar swamp at North Scituate. In addition, in 1897, I saw a pair of Brown Creepers in another cedar swamp some six miles distant from the one in which the nest was found in 1900; and in 1899, about May 12, I met two pairs of Brown Creepers in what is known as "Valley Swamp," near South Weymouth. It seems to me that the right of the Brown Creeper to a place among the regular summer birds nesting locally and sparingly in favorable localities in southern Massachusetts, is sufficiently vindicated, after having been challenged and doubted for many years. The conditions which determine the distribution of the Creeper in this region, are apparently a very moist, humid atmosphere, dense evergreen growth, through which the sun penetrates with difficulty, and considerable extent of wild woodland which is not disturbed by man throughout the nesting season. That the bird is common in the breeding season I do not believe. That it is far more common than has been supposed, it seems to me is also evident. That it is and has been a regular summer resident in the cedar swamps of Massachusetts — unseen because usually inaccessible — needs little if any additional proof. Unfortunately, May and June have been with me the busiest months of the year, and I have had little opportunity to search as carefully or as often for the bird and its nest as I have desired.

THE BREEDING OF THE BROWN CREEPER IN EASTERN MASSACHUSETTS.

BY FREDERIC H. KENNARD AND FREDERIC B. MCKECHNIE.

Plates X-XII.

As a first record of the breeding of the Brown Creeper (*Certhia familiaris americana*) in eastern Massachusetts we have the account of Dr. J. A. Allen in his 'Catalogue of the Birds of Springfield, Mass.'¹ in which he describes the bird as "common. Resident;

¹ Proceedings Essex Institute, Vol. IV, July, 1864, p. 69.

but most numerous in winter. Found mostly in high open woods, but also common in city. Breeds sparingly." Then he goes on to say: "Mr. Bradley Hosford showed me a nest of this species June 2nd, 1863, containing young that had apparently been hatched for some four or five days. The nest was in a large elm, in Court Square, Springfield, about ten feet from the ground, and built behind a strip of thick bark that projected in such a way as to leave a protected cavity behind it."

Then after a number of years H. D. Minot, in 'The Land Birds and Game Birds of New England,' published in 1877, speaks on page 68 of having found, presumably in the early 70's, "in the neighborhood of Boston," a nest containing fresh eggs, "a few feet from the ground placed in the cavity formed by the rending of a tree by lightning."

Next, the late Dr. T. M. Brewer, in an article on 'The American Brown Creeper,'¹ writes of its nesting "recently near Lynn, Mass.," and then of its nest being found "after a careful search by Mr. Charles T. Snow of Taunton, on the 27th of May, 1878, in the middle of a large maple swamp, where he had noticed the presence of the bird for several previous summers, without being able to discover its nest." This last evidence is of importance as showing both the continued presence of the bird in this locality for several years, as well as the difficulty in finding its nest. Then he goes on to say, speaking of the nest: "This had been constructed between the bark and the trunk of a dead pitch pine," and after further describing it says that "the young were just leaving the nest, which was ten feet from the ground."

With only the above records to fall back upon, although Stearns and Coues² went to the extreme of speaking of this bird as "resident throughout New England and a common bird in all suitable localities," it is only natural that at this time it was held that the breeding of the Brown Creeper in eastern Massachusetts was of "rare and exceptional occurrence."

¹ Bulletin of the Nuttall Ornithological Club, Vol. IV, No. 2, April, 1879, pp. 88, 89.

² New England Bird Life, Vol. I, p. 90, 1881, by W. A. Stearns, edited by Dr. Elliott Coues.

In October, 1879, appeared Mr. Wm. Brewster's most interesting article on 'The Breeding Habits of the American Brown Creeper,'¹ an article with which all the readers of 'The Auk' should, if possible, be familiar before perusing the present paper. In it Mr. Brewster describes very beautifully and at length, the finding of a number of nests of this bird near Lake Umbagog, Me., between May 31 and June 23, 1879.

With the exception of the fact that the late Mr. Elwin A. Capen of Canton, Mass., has told Mr. McKechnie of a pair of these birds which spent one breeding season near his home in the early 80's but whose nest he had been unable to discover, although he felt confident that it was somewhere in the vicinity, there seems to be a lapse in the records of the breeding of the Brown Creeper in eastern Massachusetts, till Dr. Arthur P. Chadbourne published a record² in which he tells of seeing Brown Creepers in a swamp near Plymouth, Mass., during the months of June and July. In speaking of the swamp he says, "in many portions the original growth of huge white cedars (*Cupressus thyoides*) and hemlock (*Abies canadensis*) have never been cut." Afterwards, we believe, Dr. Chadbourne found these birds supposedly breeding for several successive years, and on one occasion found their nest which he photographed.³

The next record of the breeding of this bird in eastern Massachusetts that we know of, and hitherto unpublished, has been sent to us by Mr. Wm. Brewster, and will be cited by him in his forthcoming 'Birds of the Cambridge Region of Massachusetts.' In it Mr. Brewster states that "in 1898 a nest of the Brown Creeper was found at Andover, Mass., by the late Mr. Howard S. Ford of that place," who wrote him that "it was in a dead oak, placed within a sneath of loose bark about four feet from the ground. The tree stands in an oak grove which lies between cultivated fields on the one hand, and an extensive swamp on the other."

¹ Bulletin of the Nuttall Ornithological Club, Vol. IV, October, 1879, pp. 199-209.

² The Auk, Vol. XIII, October, 1896, p. 346.

³ Since the above was written Dr. Chadbourne has sent an article to the current number of 'The Auk' giving a full and detailed account of this occurrence.

"This nest," Mr. Brewster adds, "was discovered on April 26, when it was finished, but empty. There were three eggs on May 6, and six on May 13."

So, with only the above records, while it has been generally accepted that the Brown Creeper breeds not uncommonly in certain western and higher portions of the State,¹ it has not been conceded that they breed otherwise than accidentally in the eastern and lower portions of the State.

The writers of this paper have, however, long been of the opinion that the Brown Creeper was not so rare, in certain portions at least of eastern Massachusetts, as was generally supposed.

A pair of Creepers had been seen during several breeding seasons in the late 80's, about a certain woodland near a swamp not far from the home of Mr. Kennard at Brookline, Mass. Not, at this time, knowing how or where or when their nests should be hunted, his searches were unsuccessful, and not being aware of their supposed rarity at this season, we regret to say no record of the dates was kept.

Mr. McKechnie had noted in a swamp at Canton, Mass., on May 13, 1898, one bird, which, from its peculiar actions, he supposed had a nest nearby. He saw Creepers again in this same swamp in one of the succeeding years, the date of which, however, has been lost, and noted a pair of them there still later on May 11, 1902, while on May 28, 1903, in this same swamp, he chanced upon a nest with young, while hunting for the nest of a Canadian Warbler (*Wilsonia canadensis*).

He was watching a pair of Warblers, when his attention was attracted by a Brown Creeper moving quickly, and apparently anxiously, from tree to tree, gathering something in her bill, either nesting material or food. All at once he saw two birds instead of one, and they appeared to have a strong liking for a certain group of young hemlocks, till suddenly one of them disappeared, and

¹ See Walter Faxon, 'The Summer Birds of Berkshire County, Mass.,' *The Auk*, Vol. VI, April, 1889; Faxon and Hoffmann, 'The Birds of Berkshire County, Mass.,' in 'Collections of the Berkshire Historical and Scientific Society,' published by the society in 1900; and Howe and Allen, 'The Birds of Massachusetts,' p. 90.

shortly reappeared minus the contents of its bill. Then, after a few minutes, the other bird, flitting in the same direction and watched closely, was seen to enter a slit about one and one-half feet from the base of a nine-inch red maple growing beside the hemlocks. On approaching the tree the old bird flew out disclosing a nest full of young, nearly fledged, number unknown, although four were visible. The slit was about ten inches long by one and one-half inches wide, and led into a hollow within the tree. (Plate X, Fig. 1.)

The finding of this nest in 1903, and the supposition that these birds probably built there every year, caused us to make up our minds that we would not only find this nest again in the spring of 1904, but would also keep our eyes and ears open for Creepers in other suitable localities, either in Canton, or Brookline, or elsewhere; with the result that we actually found four nests with eggs, in four different swamps, and knew of one other pair of birds for whose nest we did not have time to hunt.

For convenience we will take each nest separately, giving as briefly as possible an account of its finding and the methods employed in hunting for it.

At Brookline, Mass., on April 25, 1904, at about dusk, while walking along a path bordering the swamp about which Creepers had in previous years been seen in the breeding season, Mr. Kennard was startled by hearing a strange, sweet song, one that was new to him, and which he soon found came from one of a pair of Creepers that were flitting along the hillside beside the swamp.

This song which they repeat at intervals while flitting and feeding about the tree trunks, is difficult to describe, except to say, perhaps, that while it is nothing like that of the Winter Wren, either in length or strength, it nevertheless reminds one of it on account of what may be called its sylvan quality. Mr. Kennard watched them for some time, until it was dark, and they had flown off across the swamp, then noting the exact locality, he resolved to return at a later day.

On May 2, a careful search was made for these birds, and after about an hour's unsuccessful hunt they were finally located, near where they had been seen before. They seemed, however, to have no idea of visiting their nest, if they had one, but spent their time feeding, and led a fruitless chase about the swamp.

Whatever our success later in finding and tracing them to their nests, we owe to our method of first locating them by ear, listening for those faint call notes that they utter so constantly while feeding, and which are so singularly like those of the Golden-crowned Kinglet; and then when once seen, following them wherever they may lead, through swamps and thickets, never losing sight of them for a moment, if possible.

May 3, at about 3:30 P. M., after a half hour's search, these birds were again located near where they had been seen before, and after about an hour's watching and wading back and forth through the swamp, which was two to three feet deep with water, one of the birds was seen to go behind a piece of loose bark about ten feet up, on an old dead maple stub. (Plate X, Fig. 2.) Behind this bark was a typical nest, evidently an old one, but from its remarkably good state of repair, undoubtedly last year's.

Needless to say, upon this discovery, efforts at finding this year's nest were redoubled, and as the birds had been lost sight of while the old nest was being inspected, a systematic search of that part of the swamp was begun, till finally at about 6:15 P. M. a bunch of sticks was discovered protruding beneath the bottom of a piece of bark about four and one-half feet up, on the stub of a dead fifteen-inch white pine.

This proved to be the much sought for nest; not quite finished as to superstructure and lining, and also apparently ready to fall into the water on the slightest provocation. (Plate XI, Fig. 1.) So sticks were stuck beneath it into the cracks of the tree as a support; these, however, proved later to have been unnecessary, as the nest was firmly secured to the trunk of the tree by cobwebs, plant down, etc., with which the rather bulky foundation was held together.

The birds had not been seen since the discovery of the old nest about an hour and a half before.

On May 6, this nest seemed to be about completed. The sides or points at each side of the nest, which Mr. Brewster calls 'horns,' had been built up and made more compact, and the hollow thus formed between these horns and the trunk and the bark of the tree had been lined and made into a beautiful soft deep cup. The Creepers were calling to each other and feeding, as usual,

but at the other end of the swamp. They had never been seen within 60 or 75 yards of their nest. If the nest were approached they always kept quiet, and this afternoon, while it was being watched for over an hour, they made no appreciable move, one of them sitting in one spot for about twenty minutes, never making a motion except to turn his head in watching the watcher.

On May 8 the nest contained one egg, and the birds were up to their usual tactics of feeding, apparently unconcernedly, the male singing spasmodically, when no one was near the nest, or keeping absolutely quiet if the nest was approached. May 11 the nest contained three eggs, and the birds were again at their usual tactics. May 15 we both visited the nest, and procured a set of seven beautiful eggs, Mr. McKechnie taking several photographs in spite of the fact that it was cold and rainy, and we were bare-legged in icy cold water. The female was sitting as we approached, and only flew off upon the appearance of a human eye within a few inches of her as she sat on her nest. She flitted about for a few moments on the neighboring tree trunks until we had stepped back a little way from her nest, when she quickly flew to it, alighting on the trunk just beneath and then running up and in under the bark, and this, in spite of the fact that Mr. McKechnie was setting up his camera within fifteen feet of her. We flushed her from the nest several times, and she invariably returned as soon as there was an opportunity. The male hung about at a distance, calling to her but never coming very near.

On May 1, 1904, the writers watched and followed for over an hour the pair of Creepers, at Canton, Mass., of which Mr. McKechnie had known for several seasons, and the young of which he had found the previous year. They led us away from the swamp in which we had located them, feeding, singing, and flitting about in such an aimless sort of fashion that we finally gave up following them, thinking from their actions either that they had not yet begun to lay, or else that their set of eggs was as yet incomplete. Mr. McKechnie returned here on the 8th of May and could find only one bird, which led him off out of the swamp and then, leaving him, flew back, not to be seen again. After hunting around for two hours he concluded the female was sitting and the male keeping quiet pending his departure.

On May 14 we both returned to this swamp and were lucky enough to find one of the birds within five minutes by our usual method of listening for their call notes. After watching him for perhaps ten minutes he suddenly flew to the foot of a small dead red maple, and from an aperture in this same maple hopped the female whom he fed. This aperture was about three and one-half feet from the ground and led into the nest, which was built like a Chickadee's in the heart of the tree, and which contained seven well incubated eggs. Although it was raining, McKechnie started in immediately to photograph the nest, while Kennard endeavored to keep the female away from it till McKechnie could set up his camera, and catch her if possible as she entered. (Plate XI, Fig. 2.) She seemed, however, to be particularly solicitous, succeeded in getting back on to her eggs, and stuck so close that after pounding on the tree, shaking it, etc., all to no purpose, we finally had to pry her off with a stick, a dangerous process so far as the eggs were concerned. When off the nest she never went far away, while the male, on his part, seldom came near except to feed her, which he did several times, both when she was on her eggs and came out to be fed, and after she had been dislodged and was on some neighboring tree.

The maple was one of twins—the other being alive—and stood in a very large wet maple swamp (Plate XII, Fig. 1) in which there were a few pines and hemlocks, large and small, scattered about, but in which there appeared to be none of those large dead trees with pendant strips of bark which the Creepers seem to like best; this probably accounting for their building in holes both in 1903 and 1904.

On the afternoon of May 1, 1904, while walking along the edge of another swamp in Canton, perhaps a mile or so from the swamp where we had in the morning been watching the above Creepers, we first heard and then saw another Creeper with something in her bill. We sat down and kept quiet until she finally flew to a dead white pine and disappeared under a piece of bark some twelve or fifteen feet from the ground. She soon emerged, however, and repeated the operation several times, until finally appearing to catch sight of us, she vanished. We went to the foot of the tree, but could see nothing and did not dare to climb it for fear of further disturbing her.

On May 8 Mr. McKechnie visited this swamp again and found both birds easily. He watched the male for about an hour, until the female appeared and attracted his attention by perching practically immovable for another hour, watching him, preening herself, etc., until she finally tired him out. The male had during this time visited her often with food.

An inspection of the supposed nesting site, however, revealed the fact that they had done nothing to it and had apparently moved elsewhere; possibly they had been frightened away by our watching them on May 1. On May 13 we both visited the swamp at about 9 A. M. We thought we heard their call note once, but we were unable to find them. So, as they were behaving this way, we concluded to make a systematic search, which was finally rewarded after about an hour and a half of wading and crawling in water and sphagnum through all kinds of thickets, high bush blueberries, black alders, clethra, mountain holly, and the like, by the finding of the nest with five fresh eggs behind the bark of a dead 14-inch white pine, some little distance from where we had first seen them. The nest was not what one could truly call conspicuous, only a few twigs showing through a rift in the bark some 12 or 15 feet up, and just above the second limb on the right of the trunk, the whole tree being pretty well covered with bark. On May 16 Mr. McKechnie took a set of six fresh eggs from this nest. The female was sitting as he approached, and stayed on her eggs until he had climbed up and was actually looking in at her, when she hopped off the nest, and after clinging for a moment to the trunk just above it, disappeared through a back entrance.

Both birds hung about the vicinity for a while, but seemed possibly less solicitous than had the other pairs in our experience. She only went to the nest once while it was being photographed, and the male fed her occasionally. Plate XII, Fig. 2, shows a back view of this nest as it looked when stripped from the tree, together with its bark thatch.

On May 12, 1904, at about dusk, while Mr. Kennard was in the top of a red maple on the edge of a swamp in Canton, inspecting a Hairy Woodpecker's nest, he heard the call notes of a pair of Brown Creepers as they flitted through the woods behind him.

He did not see the birds, much less follow them, but only was able to note the direction in which they apparently flew.

Two days later, however, on May 14, after finding one nest in a swamp two miles away, we determined to have a look for this pair, which we guessed were probably breeding in a certain cedar swamp. The quest seemed nearly hopeless, but we had an afternoon to spare, and waded in accordingly.

The water was deep, the trees were thick and the swamp particularly dark, as it was cloudy, while the leaves that were then bursting forth added very materially to our difficulties. However, after an hour, we at last thought we heard one of the call notes of the Creeper, a note that closely resembles that soft call which Chickadees often utter when feeding and which differs somewhat from the Creeper's ordinary Kinglet-like call. After considerable search we finally discovered the Creeper, and the discovery seemed to be mutual, for he allowed us to light our pipes and sit down and watch him for about fifteen minutes, during which he never stirred until, apparently making up his mind that we were harmless, he moved on. The trees and bushes were so thick, and his movements so rapid, that it was impossible to keep an eye on him all the time, and we often had to content ourselves with merely a general idea of his whereabouts. When all at once we realized that two birds had come upon the scene, our difficulties were doubled, each of us trying to watch one bird, and often finding that we were watching the other's, particularly after the male had mixed things up by feeding the female, which he did at intervals. However, one of them finally flew to a hard pine stub, some ten feet from where one of us was standing, and disappeared beneath a long strip of bark about six feet above the water.

One of us climbed on the other's shoulders and, on prying out the bark and peeking in, found that the nest contained six fresh eggs. This nest could never have been discovered had it not been for the bird's kindness in leading us to it, as it was absolutely hidden behind a very large strip of bark, while the stub stood in the middle of a very thick tangle, so thick in fact that we were unable to photograph it, as we could not do so without cutting away a lot of trees, shrubs, etc., and we had no hatchet.

In addition to the above records, Dr. Chas. W. Townsend

writes us of his having found at Hamilton, Mass., on May 11, 1904, a pair of these birds "building a nest behind the loose bark of a pitch pine stub about ten feet from the ground."¹ It was situated in "mixed woods of white pine and white oak with a few white birch and pitch pines on the border of a red maple swamp." He was unable to look into the nest without disturbing it, but knows that they later hatched and reared their brood.

Summing up the evidence here presented, it seems to us that this species may have been in the past overlooked. The observers now are more numerous than heretofore, and accordingly are able to cover much greater territory. The birds themselves are inconspicuous and apparently very shy when building their nests or laying their eggs; and the breeding places in this vicinity, at least, that they seem best to like, leaving out of consideration such an unusual site as that recorded by Dr. Allen, appear to be in or about those cool wild swamps, which, in the breeding season are apt to be avoided by self-respecting mankind. Maple and cedar swamps, or dark pine or hemlock groves, with thickets and tangles of a more or less boreal flora, and preferably those in which dead trees and stubs may be found, to which the loose bark is still clinging.

Then again, one must get into the woods early in hunting for these birds, in order properly to locate them, perhaps while the ice is still in the swamps and the water deep. If this is not done and the leaves burst forth before the birds are found, even though when incubating they appear to be less shy, the task of finding their nest is much more difficult. They seem to breed earlier hereabouts than we had been led to suppose, and we believe that some, at least, of these birds that one sees in the latter part of April may be residents and not migrants as heretofore supposed.

Finally, after duly weighing the above evidence it seems to us that the American Brown Creeper (*Certhia familiaris americana*) may be taken from the list of birds whose breeding in eastern Massachusetts is purely accidental, and placed rather in a list of those birds, which, though perhaps rare, may be found breeding locally, but not uncommonly in suitable localities.

¹ See 'The Birds of Essex County, Mass.,' by Dr. Chas. W. Townsend.